

Use Attainability Analysis
for

WBID 1351 Horse Creek

Submitted by

SES, Inc.

To

Missouri Department of Natural Resources

Water Protection Program

Date Received: June 4, 2007

Field Data Sheets for Recreation Use Stream Surveys
Data Sheet A - Water Body Identification
(For water body being surveyed)

Water Body Information

Water Body Name:	Horse Creek	WBID:	1351
8 digit HUC code:	10290106	County:	Dade
Upstream Legal Description	T34N	R29W	Sec 35
Downstream Legal Description	T31N	R28W	Sec 15
Number of Sites Evaluated	15		
List all site numbers, listed upstream to downstream			
12, 13, 14, 15, 11, 10, 9, 7, 8, 6, 3, 5, 4, 2, 1			

Discharger Facility Information

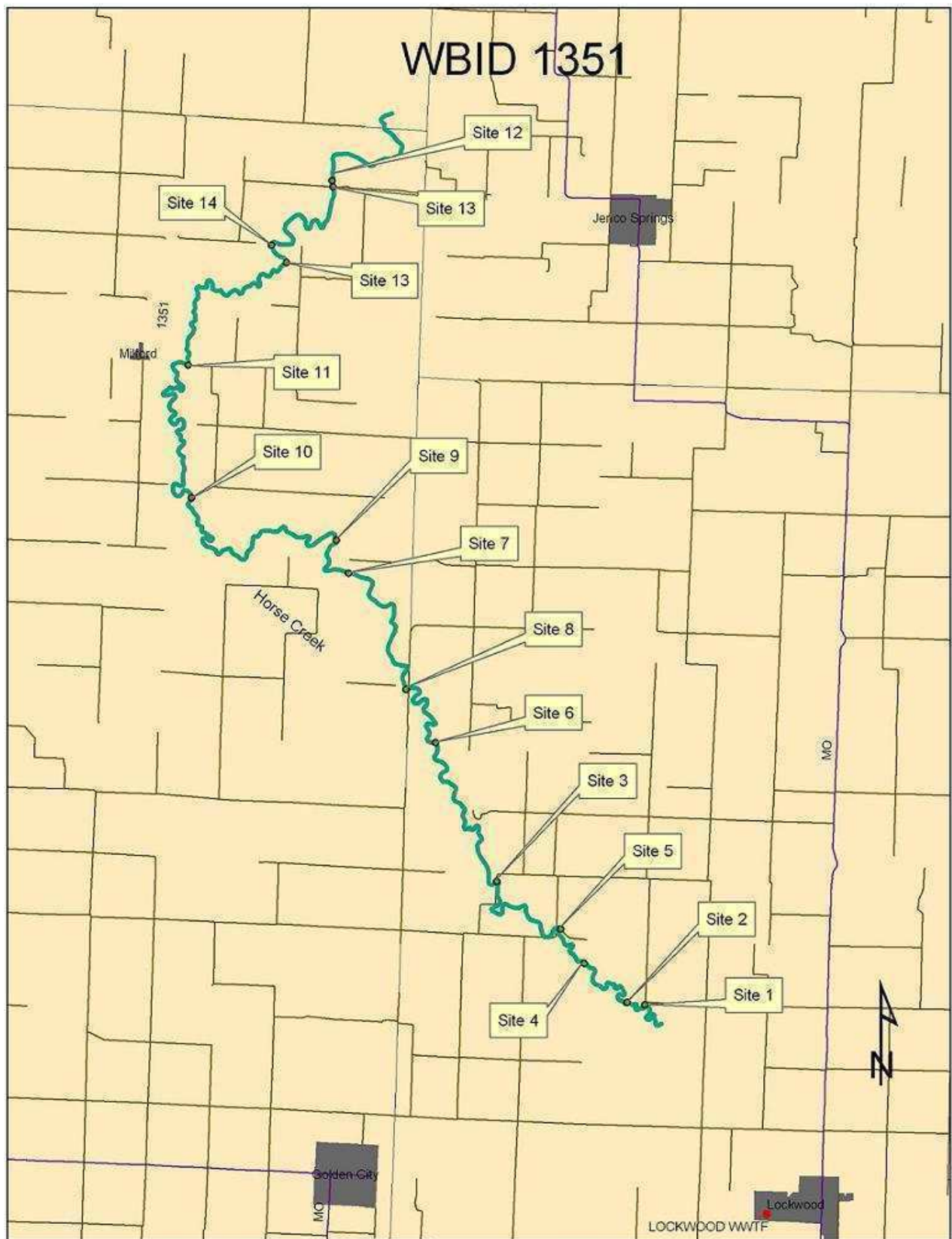
Discharger Facility Name(s):	Lockwood WWTF
Discharger Permit Number(s):	MO0030473

UAA Surveyor

Name of Surveyor:	Gilisa Gould	Telephone Number:	913-307-0046
Organization/Employer: SES, Inc.			
Position: Field Team Leader			

Signed: _____ Date: _____

WBID 1351



Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 1

Date and Time: 8.23.07 9:30 AM

Current Weather Conditions cloudy, windy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Downstream from NE 90 Road

GPS Mark: 61

Upstream Photo 2 Downstream Photo 1

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	<u>Fence</u>
Steep slopes	None of the Above	<u>Other</u>	<u>pasture</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 1
Mark # 61 **Dissolved Oxygen (ppm)** 5.2
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? y

Select one of the following channel features:

	% of Channel Feature				
Riffle					
Run	45				
Pool	55				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? y

Substrate:

% Cobble	% Gravel	50% Sand	50% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

Broadleaf arrowhead at one transect.

Water Characteristics

Odor	Sewage	<u>Musky</u>	Chemical	None	Other
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u> <u>brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 1 Mark # 61 WBID # 1351

Depth (m)		Depth (m)		Depth (m)	
Transect 1	0.40	Transect 5	0.45	Transect 9	1.00
Substrate:	0.90	Substrate:	0.80	Substrate:	1.00
silt/sand	1.00	silt/sand	1.00	silt/sand	1.00
Water Clarity:	1.00	Water Clarity:	1.00	Water Clarity:	1.00
none	1.00	none	1.00	none	1.00
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
run	1.00	pool	1.00	run	1.00
Channel Width:	0.95	Channel Width:	1.00	Channel Width:	1.00
10.00	0.70	9.00	1.00	8.00	1.00
0.98	0.65	1.00	0.85	1.00	1.00
Transect 2	0.65	Transect 6	0.80	Transect 10	1.00
Substrate:	1.00	Substrate:	1.00	Substrate:	1.00
silt/sand	1.00	silt/sand	1.00	silt/sand	1.00
Water Clarity:	1.00	Water Clarity:	1.00	Water Clarity:	1.00
none	1.00	none	1.00	none	1.00
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
run	1.00	pool	1.00	run	1.00
Channel Width:	1.00	Channel Width:	1.00	Channel Width:	1.00
11.00	1.00	8.00	1.00	8.00	0.85
1.00	1.00	1.00	1.00	1.00	0.60
Transect 3	0.60	Transect 7	1.00	Transect 11	0.60
Substrate:	0.75	Substrate:	1.00	Substrate:	0.70
silt/sand	1.00	silt/sand	1.00	silt/sand	0.95
Water Clarity:	1.00	Water Clarity:	1.00	Water Clarity:	1.00
none	1.00	none	1.00	none	1.00
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
run	1.00	run	1.00	pool	1.00
Channel Width:	1.00	Channel Width:	1.00	Channel Width:	0.80
10.00	1.00	7.00	1.00	10.00	0.65
1.00	1.00	1.00	1.00	0.88	0.60
Transect 4	0.70	Transect 8	1.00		
Substrate:	0.85	Substrate:	1.00		
silt/sand	1.00	silt/sand	1.00		
Water Clarity:	1.00	Water Clarity:	1.00		
none	1.00	none	1.00		
Channel Feature:	1.00	Channel Feature:	1.00		
pool	1.00	run	1.00		
Channel Width:	1.00	Channel Width:	1.00		
7.00	1.00	7.00	1.00		
1.00	0.80	1.00	1.00		

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 2

Date and Time: 8.23.07 10:30 AM

Current Weather Conditions cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) NE 90 Road

GPS Mark: 62

Upstream Photo 3 Downstream Photo 4

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	None of the Above	<u>Other</u>	<u>hayground, a house</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 2
Mark # 62 **Dissolved Oxygen (ppm)** 4.8
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle					
Run					
Pool	100				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

% Cobble	% Gravel	50% Sand	50% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

none

Water Characteristics

Odor	Sewage	<u>Musky</u>	Chemical	None	Other
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u> <u>brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 2 Mark # 62 WBID # 1351

Depth (m)		Depth (m)		Depth (m)	
Transect 1	0.35	Transect 5	0.45	Transect 9	0.45
Substrate:	0.70	Substrate:	0.85	Substrate:	0.80
silt/sand	1.00	silt/sand	1.00	silt/sand	0.95
Water Clarity:	1.00	Water Clarity:	1.00	Water Clarity:	0.95
none	1.00	none	1.00	none	0.95
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
pool	1.00	pool	1.00	pool	1.00
Channel Width:	1.00	Channel Width:	1.00	Channel Width:	1.00
10.00	1.00	10.00	1.00	11.00	1.00
1.00	0.85	1.00	0.90	0.95	0.70
Transect 2	0.20	Transect 6	0.60	Transect 10	0.40
Substrate:	0.65	Substrate:	0.75	Substrate:	0.75
silt/sand	0.80	silt/sand	1.00	silt/sand	0.90
Water Clarity:	0.95	Water Clarity:	1.00	Water Clarity:	1.00
none	1.00	none	1.00	none	1.00
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
pool	1.00	pool	1.00	pool	1.00
Channel Width:	1.00	Channel Width:	1.00	Channel Width:	0.90
10.00	0.75	11.00	0.80	10.00	0.80
0.88	0.70	1.00	0.65	0.90	0.45
Transect 3	0.40	Transect 7	0.45	Transect 11	0.30
Substrate:	0.80	Substrate:	0.80	Substrate:	0.70
silt/sand	0.90	silt/sand	1.00	silt/sand	0.95
Water Clarity:	1.00	Water Clarity:	1.00	Water Clarity:	0.95
none	1.00	none	1.00	none	0.95
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
pool	1.00	pool	1.00	pool	1.00
Channel Width:	0.95	Channel Width:	1.00	Channel Width:	0.80
11.00	0.70	12.00	0.75	10.00	0.75
0.93	0.60	1.00	0.60	0.88	0.75
Transect 4	0.45	Transect 8	0.50		
Substrate:	0.80	Substrate:	0.55		
silt/sand	1.00	silt/sand	0.80		
Water Clarity:	1.00	Water Clarity:	1.00		
none	1.00	none	1.00		
Channel Feature:	1.00	Channel Feature:	1.00		
pool	1.00	pool	1.00		
Channel Width:	0.75	Channel Width:	1.00		
10.00	0.70	9.00	1.00		
0.90	0.60	1.00	0.75		

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 3

Date and Time: 8.23.07 11:30 AM

Current Weather Conditions partly cloudy, windy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Highway C

GPS Mark: 63

Upstream Photo 7 Downstream Photo 6

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 3
Mark # 63 **Dissolved Oxygen (ppm)** 3.3
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle					
Run	100				
Pool					

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

% Cobble	% Gravel	% Sand	50% Silt
50% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

none

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u> <u>Brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 3 Mark # 63 WBID # 1351

Depth (m)		Depth (m)		Depth (m)	
Transect 1	0.05	Transect 5	0.20	Transect 9	0.15
Substrate:	0.30	Substrate:	0.95	Substrate:	0.65
silt/clay	0.50	silt/clay	1.00	silt/clay	1.00
Water Clarity:	0.75	Water Clarity:	1.00	Water Clarity:	1.00
none	0.90	none	1.00	none	1.00
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
run	1.00	pool	1.00	run	1.00
Channel Width:	1.00	Channel Width:	1.00	Channel Width:	1.00
9.00	1.00	7.00	1.00	9.00	1.00
0.95	1.00	1.00	1.00	1.00	0.70
Transect 2	0.05	Transect 6	0.35	Transect 10	0.20
Substrate:	0.40	Substrate:	0.80	Substrate:	0.70
silt/clay	0.65	silt/clay	0.95	silt/clay	0.95
Water Clarity:	0.90	Water Clarity:	1.00	Water Clarity:	0.95
none	1.00	none	1.00	none	0.95
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
run	1.00	pool	1.00	run	1.00
Channel Width:	1.00	Channel Width:	1.00	Channel Width:	1.00
8.00	1.00	6.00	1.00	8.00	1.00
1.00	1.00	1.00	1.00	0.98	1.00
Transect 3	0.05	Transect 7	0.30	Transect 11	0.15
Substrate:	0.60	Substrate:	0.80	Substrate:	0.55
silt/clay	1.00	silt/clay	0.75	silt/clay	0.85
Water Clarity:	1.00	Water Clarity:	1.00	Water Clarity:	0.90
none	1.00	none	1.00	none	1.00
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
run	1.00	run	1.00	run	1.00
Channel Width:	1.00	Channel Width:	1.00	Channel Width:	1.00
9.00	1.00	8.00	0.80	7.00	1.00
1.00	1.00	0.90	0.60	0.95	0.70
Transect 4	0.20	Transect 8	0.20		
Substrate:	0.75	Substrate:	0.75		
silt/clay	1.00	silt/clay	1.00		
Water Clarity:	1.00	Water Clarity:	1.00		
none	1.00	none	1.00		
Channel Feature:	1.00	Channel Feature:	1.00		
run	1.00	run	1.00		
Channel Width:	1.00	Channel Width:	1.00		
10.00	1.00	11.00	1.00		
1.00	1.00	1.00	1.00		

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 4

Date and Time: 8.23.07 12:30pm

Current Weather Conditions partly cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Road 80 behind house

GPS Mark: 64

Upstream Photo 9 Downstream Photo 8

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	None of the Above	<u>Other</u>	<u>Houses and pasture</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 4
Mark # 64 **Dissolved Oxygen (ppm)** 3.5
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? y

Select one of the following channel features:

	% of Channel Feature				
Riffle	9				
Run	64				
Pool	27				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

5% Cobble	% Gravel	% Sand	95% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

small willow in 70% of the channel at transect 6

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u> <u>brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 4

Mark # 64

WBID # 1351

	Depth (m)
Transect 1	0.10
Substrate:	0.35
cobble/silt	0.40
Water Clarity:	0.60
none	0.85
Channel Feature:	1.00
run	1.00
Channel Width:	1.00
8.00	1.00
0.80	0.75
Transect 2	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
run	1.00
Channel Width:	1.00
9.00	1.00
1.00	1.00
Transect 3	0.70
Substrate:	0.95
silt	0.95
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
run	1.00
Channel Width:	1.00
8.00	1.00
1.00	1.00
Transect 4	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
run	1.00
Channel Width:	1.00
10.00	1.00
1.00	1.00

	Depth (m)
Transect 5	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
8.00	1.00
1.00	1.00
Transect 6	0.15
Substrate:	0.25
silt	0.40
Water Clarity:	0.40
some	0.40
Channel Feature:	0.30
riffle	0.20
Channel Width:	0.05
9.00	0.05
0.23	0.05
Transect 7	0.30
Substrate:	0.75
silt	0.90
Water Clarity:	0.95
some	0.95
Channel Feature:	0.95
pool	0.95
Channel Width:	1.00
7.00	0.75
0.93	0.50
Transect 8	0.75
Substrate:	0.90
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
9.00	1.00
1.00	0.45

	Depth (m)
Transect 9	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
run	1.00
Channel Width:	1.00
7.00	1.00
1.00	1.00
Transect 10	0.70
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
run	1.00
Channel Width:	1.00
10.00	1.00
1.00	0.85
Transect 11	0.80
Substrate:	0.95
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
run	1.00
Channel Width:	1.00
19.00	0.70
1.00	0.65

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 5

Date and Time: 8.23.07 2:00 PM

Current Weather Conditions cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) upstream site #4

GPS Mark: 65

Upstream Photo 10 Downstream Photo 11

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

Select one of the following channel features:

Odor	Sewage	Musky	Chemical	<u>None</u>	Other	
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u>	<u>brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other	
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other	

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 5

Mark # 65

WBID # 1351

	Depth (m)
Transect 1	0.10
Substrate:	0.40
cobble/silt	0.40
Water Clarity:	0.40
none	0.50
Channel Feature:	0.45
pool	0.45
Channel Width:	0.40
7.00	0.20
0.40	0.05
Transect 2	0.10
Substrate:	0.30
cobble	0.30
Water Clarity:	0.35
none	0.35
Channel Feature:	0.40
pool	0.35
Channel Width:	0.25
7.00	0.15
0.30	0.05
Transect 3	0.00
Substrate:	0.05
cobble	0.10
Water Clarity:	0.15
some	0.25
Channel Feature:	0.20
rifle	0.10
Channel Width:	0.10
8.00	0.10
0.10	0.05
Transect 4	0.10
Substrate:	0.40
cobble/gravel	0.50
Water Clarity:	0.60
none	0.80
Channel Feature:	0.90
run	0.70
Channel Width:	0.65
9.00	0.40
0.55	0.20

	Depth (m)
Transect 5	0.10
Substrate:	0.40
gravel/silt	0.45
Water Clarity:	0.50
none	0.50
Channel Feature:	0.50
run	0.40
Channel Width:	0.30
5.00	0.10
0.40	0.05
Transect 6	0.00
Substrate:	0.10
gravel/silt	0.40
Water Clarity:	0.50
none	0.40
Channel Feature:	0.30
run	0.10
Channel Width:	0.10
7.00	0.10
0.10	0.00
Transect 7	0.05
Substrate:	0.25
silt	0.30
Water Clarity:	0.40
none	0.45
Channel Feature:	0.40
run	0.40
Channel Width:	0.20
8.00	0.15
0.28	0.10
Transect 8	0.05
Substrate:	0.40
gravel/silt	0.40
Water Clarity:	0.45
none	0.45
Channel Feature:	0.40
run	0.35
Channel Width:	0.25
8.00	0.10
0.38	0.05

	Depth (m)
Transect 9	0.00
Substrate:	0.40
gravel/silt	0.40
Water Clarity:	0.50
none	0.60
Channel Feature:	0.50
run	0.50
Channel Width:	0.60
8.00	0.30
0.45	0.20
Transect 10	0.30
Substrate:	0.70
gravel/silt	0.80
Water Clarity:	0.75
none	0.80
Channel Feature:	0.55
run	0.45
Channel Width:	0.25
10.00	0.25
0.50	0.05
Transect 11	0.10
Substrate:	0.65
gravel/silt	0.80
Water Clarity:	0.75
none	0.85
Channel Feature:	0.85
run	0.85
Channel Width:	0.85
10.00	0.75
0.78	0.40

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 6

Date and Time: 8.23.07 3:00 PM

Current Weather Conditions cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) private drive

GPS Mark: 66

Upstream Photo 13 Downstream Photo 12

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	<u>Fence</u>
Steep slopes	None of the Above	<u>Other</u>	<u>pasture and hay ground</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 6
Mark # 66 **Dissolved Oxygen (ppm)** 3.2
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle	18				
Run	37				
Pool	45				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? y

Substrate:

18% Cobble	27% Gravel	10% Sand	45% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

20% willow at 3 transects

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u> <u>brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	<u>Foam</u>	None	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 6

Mark # 66

WBID # 1351

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.20	Transect 5	0.15	Transect 9	0.45
Substrate:	0.25	Substrate:	0.25	Substrate:	0.70
gavel	0.30	cobble/silt	0.35	gravel/silt	0.70
Water Clarity:	0.50	Water Clarity:	0.35	Water Clarity:	0.70
none	0.40	none	0.35	none	0.65
Channel Feature:	0.40	Channel Feature:	0.40	Channel Feature:	0.45
rifle	0.35	pool	0.40	run	0.35
Channel Width:	0.10	Channel Width:	0.30	Channel Width:	0.25
6.00	0.00	7.00	0.20	6.00	0.15
0.28	0.00	0.33	0.10	0.45	0.05
Transect 2	0.00	Transect 6	0.10	Transect 10	0.50
Substrate:	0.00	Substrate:	0.50	Substrate:	0.75
sand/silt	0.00	cobble/silt	0.60	gravel/silt	0.75
Water Clarity:	0.00	Water Clarity:	0.60	Water Clarity:	0.80
some	0.10	none	0.55	none	0.70
Channel Feature:	0.10	Channel Feature:	0.50	Channel Feature:	0.45
rifle	0.00	pool	0.55	run	0.40
Channel Width:	0.10	Channel Width:	0.50	Channel Width:	0.40
6.00	0.10	6.00	0.45	7.00	0.30
0.05	0.15	0.50	0.05	0.48	0.15
Transect 3	0.00	Transect 7	0.60	Transect 11	0.20
Substrate:	0.20	Substrate:	0.45	Substrate:	0.45
cobble/sand	0.30	silt	0.55	gravel/silt	0.50
Water Clarity:	0.25	Water Clarity:	0.55	Water Clarity:	0.70
none	0.25	none	0.50	none	0.70
Channel Feature:	0.15	Channel Feature:	0.60	Channel Feature:	0.60
run	0.30	pool	0.50	run	0.30
Channel Width:	0.30	Channel Width:	0.45	Channel Width:	0.35
8.00	0.30	7.00	0.50	7.00	0.20
0.25	0.15	0.50	0.30	0.40	0.05
Transect 4	0.40	Transect 8	0.70		
Substrate:	0.15	Substrate:	0.65		
cobble/gravel	0.15	silt	0.65		
Water Clarity:	0.20	Water Clarity:	0.75		
none	0.20	none	0.70		
Channel Feature:	0.25	Channel Feature:	0.60		
pool	0.30	pool	0.50		
Channel Width:	0.20	Channel Width:	0.45		
7.00	0.10	6.00	0.45		
0.20	0.10	0.63	0.10		

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 7

Date and Time: 8.23.07 4:00pm

Current Weather Conditions cloudy, windy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Highway F

GPS Mark: 67

Upstream Photo 15 Downstream Photo 14

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 7
Mark # 67 **Dissolved Oxygen (ppm)** 4.4
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? y

Select one of the following channel features:

	% of Channel Feature				
Riffle	9				
Run	36				
Pool	55				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

23% Cobble	59% Gravel	5% Sand	13% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

small willow at transects 1, 2

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u> <u>reddish brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 7

Mark # 67

WBID # 1351

	Depth (m)
Transect 1	0.10
Substrate:	0.25
cobble	0.25
Water Clarity:	0.25
some	0.30
Channel Feature:	0.25
run	0.20
Channel Width:	0.20
2.00	0.15
0.23	0.05
Transect 2	0.00
Substrate:	0.05
cobble	0.15
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.05
rifle	0.05
Channel Width:	0.15
6.00	0.05
0.05	0.10
Transect 3	0.20
Substrate:	0.50
cobble/silt	0.35
Water Clarity:	0.35
none	0.50
Channel Feature:	0.45
pool	0.45
Channel Width:	0.35
12.00	0.25
0.35	0.30
Transect 4	0.25
Substrate:	0.35
gravel	0.35
Water Clarity:	0.45
none	0.45
Channel Feature:	0.55
pool	0.60
Channel Width:	0.60
12.00	0.60
0.45	0.45

	Depth (m)
Transect 5	0.40
Substrate:	0.40
gravel/sand	0.50
Water Clarity:	0.45
none	0.50
Channel Feature:	0.55
pool	0.60
Channel Width:	0.70
12.00	0.70
0.50	0.50
Transect 6	0.35
Substrate:	0.50
gravel	0.55
Water Clarity:	0.60
none	0.70
Channel Feature:	0.70
pool	0.65
Channel Width:	0.80
11.00	0.80
0.68	0.80
Transect 7	0.35
Substrate:	0.50
gravel	0.55
Water Clarity:	0.55
none	0.55
Channel Feature:	0.60
pool	0.65
Channel Width:	0.70
10.00	0.80
0.58	0.80
Transect 8	0.35
Substrate:	0.55
gravel	0.60
Water Clarity:	0.55
none	0.50
Channel Feature:	0.55
pool	0.60
Channel Width:	0.60
10.00	0.45
0.55	0.30

	Depth (m)
Transect 9	0.40
Substrate:	0.50
gravel	0.55
Water Clarity:	0.55
none	0.55
Channel Feature:	0.60
run	0.70
Channel Width:	0.60
15.00	0.45
0.55	0.15
Transect 10	0.20
Substrate:	0.20
gravel/silt	0.45
Water Clarity:	0.55
none	0.60
Channel Feature:	0.60
run	0.70
Channel Width:	0.70
8.00	0.65
0.60	0.60
Transect 11	0.10
Substrate:	0.40
gravel/silt	0.40
Water Clarity:	0.40
none	0.45
Channel Feature:	0.55
run	0.65
Channel Width:	0.70
9.00	0.50
0.43	0.40

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 8

Date and Time: 8.23.07 4:45 PM

Current Weather Conditions cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) downstream of site 7

GPS Mark: 68

Upstream Photo 18 Downstream Photo 17

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 8
Mark # 68 **Dissolved Oxygen (ppm)** 3.3
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle					
Run	55				
Pool	45				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

% Cobble	50% Gravel	50% Sand	% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

none

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u> <u>reddish brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 8

Mark # 68

WBID # 1351

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.05	Transect 5	0.10	Transect 9	0.05
Substrate:	0.20	Substrate:	0.30	Substrate:	0.25
gravel/sand	0.40	sand	0.35	gravel/sand	0.30
Water Clarity:	0.50	Water Clarity:	0.50	Water Clarity:	0.30
none	0.55	none	1.00	none	0.35
Channel Feature:	0.60	Channel Feature:	1.00	Channel Feature:	0.40
run	0.45	pool	1.00	run	0.40
Channel Width:	0.35	Channel Width:	1.00	Channel Width:	0.45
8.00	0.20	17.00	1.00	14.00	0.40
0.38	0.10	1.00	1.00	0.33	0.15
Transect 2	0.05	Transect 6	0.50	Transect 10	0.05
Substrate:	0.25	Substrate:	0.55	Substrate:	0.25
gravel/sand	0.40	gravel/sand	0.65	gravel	0.25
Water Clarity:	0.50	Water Clarity:	0.85	Water Clarity:	0.20
none	0.65	none	0.90	none	0.20
Channel Feature:	0.75	Channel Feature:	1.00	Channel Feature:	0.20
run	0.80	pool	1.00	run	0.20
Channel Width:	0.75	Channel Width:	1.00	Channel Width:	0.20
10.00	0.60	16.00	1.00	10.00	0.25
0.55	0.25	0.95	1.00	0.20	0.20
Transect 3	0.05	Transect 7	0.25	Transect 11	0.10
Substrate:	0.25	Substrate:	0.50	Substrate:	0.25
gravel/sand	0.45	sand	0.60	gravel	0.30
Water Clarity:	0.60	Water Clarity:	0.55	Water Clarity:	0.30
none	0.75	none	0.40	soome	0.35
Channel Feature:	0.80	Channel Feature:	0.40	Channel Feature:	0.20
run	1.00	pool	0.35	run	0.20
Channel Width:	1.00	Channel Width:	0.30	Channel Width:	0.20
10.00	1.00	12.00	0.20	13.00	0.15
0.78	1.00	0.38	0.10	0.20	0.10
Transect 4	0.05	Transect 8	0.00		
Substrate:	0.30	Substrate:	0.20		
gravel/sand	0.55	gravel/sand	0.30		
Water Clarity:	0.55	Water Clarity:	0.40		
none	0.65	none	0.50		
Channel Feature:	0.70	Channel Feature:	0.55		
pool	0.85	pool	0.60		
Channel Width:	1.00	Channel Width:	0.60		
13.00	1.00	13.00	0.50		
0.68	1.00	0.45	0.25		

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 9

Date and Time: 8.23.07 6:45 PM

Current Weather Conditions partly cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) 120 Road

GPS Mark: 69

Upstream Photo 21 Downstream Photo 22

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	None of the Above	<u>Other</u>	<u>picture 23 shows Quarry</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 9
Mark # 69 **Dissolved Oxygen (ppm)** 2.9
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? y

Select one of the following channel features:

	% of Channel Feature				
Riffle	73				
Run					
Pool	27				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? y

Substrate:

36% Cobble	50% Gravel	14% Sand	% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

none

Water Characteristics

Odor	Sewage	<u>Musky</u>	Chemical	None	Other
Color	<u>Clear</u>	Green	Gray	Milky	Other
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 8

Mark # 68

WBID # 1351

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.05	Transect 5	0.10	Transect 9	0.05
Substrate:	0.20	Substrate:	0.30	Substrate:	0.25
gravel/sand	0.40	sand	0.35	gravel/sand	0.30
Water Clarity:	0.50	Water Clarity:	0.50	Water Clarity:	0.30
none	0.55	none	1.00	none	0.35
Channel Feature:	0.60	Channel Feature:	1.00	Channel Feature:	0.40
run	0.45	pool	1.00	run	0.40
Channel Width:	0.35	Channel Width:	1.00	Channel Width:	0.45
8.00	0.20	17.00	1.00	14.00	0.40
0.38	0.10	1.00	1.00	0.33	0.15
Transect 2	0.05	Transect 6	0.50	Transect 10	0.05
Substrate:	0.25	Substrate:	0.55	Substrate:	0.25
gravel/sand	0.40	gravel/sand	0.65	gravel	0.25
Water Clarity:	0.50	Water Clarity:	0.85	Water Clarity:	0.20
none	0.65	none	0.90	none	0.20
Channel Feature:	0.75	Channel Feature:	1.00	Channel Feature:	0.20
run	0.80	pool	1.00	run	0.20
Channel Width:	0.75	Channel Width:	1.00	Channel Width:	0.20
10.00	0.60	16.00	1.00	10.00	0.25
0.55	0.25	0.95	1.00	0.20	0.20
Transect 3	0.05	Transect 7	0.25	Transect 11	0.10
Substrate:	0.25	Substrate:	0.50	Substrate:	0.25
gravel/sand	0.45	sand	0.60	gravel	0.30
Water Clarity:	0.60	Water Clarity:	0.55	Water Clarity:	0.30
none	0.75	none	0.40	soome	0.35
Channel Feature:	0.80	Channel Feature:	0.40	Channel Feature:	0.20
run	1.00	pool	0.35	run	0.20
Channel Width:	1.00	Channel Width:	0.30	Channel Width:	0.20
10.00	1.00	12.00	0.20	13.00	0.15
0.78	1.00	0.38	0.10	0.20	0.10
Transect 4	0.05	Transect 8	0.00		
Substrate:	0.30	Substrate:	0.20		
gravel/sand	0.55	gravel/sand	0.30		
Water Clarity:	0.55	Water Clarity:	0.40		
none	0.65	none	0.50		
Channel Feature:	0.70	Channel Feature:	0.55		
pool	0.85	pool	0.60		
Channel Width:	1.00	Channel Width:	0.60		
13.00	1.00	13.00	0.50		
0.68	1.00	0.45	0.25		

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 10

Date and Time: 8.23.07 7:15 PM

Current Weather Conditions partly cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Highway E

GPS Mark: 70

Upstream Photo 24 Downstream Photo 25

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	<u>Fence</u>
Steep slopes	None of the Above	<u>Other</u>	<u>House</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 10
Mark # 70 **Dissolved Oxygen (ppm)** 3.1
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle	9				
Run					
Pool	91				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

9% Cobble	5% Gravel	% Sand	86% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

none

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u> <u>Reddish brown</u>
Bottom Deposit	Sludge	Solids	<u>Fine Sed.</u>	None	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 9

Mark # 69

WBID # 1351

	Depth (m)
Transect 1	0.05
Substrate:	0.10
cobble/gravel	0.15
Water Clarity:	0.20
clear	0.20
Channel Feature:	0.15
riffle	0.00
Channel Width:	0.10
5.00	0.10
0.10	0.00
Transect 2	0.00
Substrate:	0.10
cobble/gravel	0.10
Water Clarity:	0.20
clear	0.15
Channel Feature:	0.15
riffle	0.20
Channel Width:	0.20
4.00	0.15
0.15	0.05
Transect 3	0.05
Substrate:	0.10
cobble/gravel	0.20
Water Clarity:	0.15
clear	0.10
Channel Feature:	0.05
riffle	0.10
Channel Width:	0.10
4.00	0.15
0.10	0.05
Transect 4	0.00
Substrate:	0.15
cobble/gravel	0.10
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.05
riffle	0.15
Channel Width:	0.10
7.00	0.05
0.10	0.00

	Depth (m)
Transect 5	0.00
Substrate:	0.05
cobble/gravel	0.10
Water Clarity:	0.05
clear	0.10
Channel Feature:	0.10
riffle	0.10
Channel Width:	0.10
9.00	0.05
0.08	0.00
Transect 6	0.10
Substrate:	0.05
cobble/gravel	0.00
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.10
8.00	0.15
0.05	0.10
Transect 7	0.05
Substrate:	0.00
cobble/gravel	0.00
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.00
riffle	0.05
Channel Width:	0.10
10.00	0.10
0.03	0.10
Transect 8	0.00
Substrate:	0.05
cobble/gravel	0.10
Water Clarity:	0.00
clear	0.05
Channel Feature:	0.10
riffle	0.10
Channel Width:	0.20
8.00	0.30
0.10	0.30

	Depth (m)
Transect 9	0.10
Substrate:	0.10
gravel/sand	0.15
Water Clarity:	0.15
clear	0.25
Channel Feature:	0.15
pool	0.15
Channel Width:	0.10
8.00	0.10
0.13	0.05
Transect 10	0.05
Substrate:	0.20
gravel/sand	0.30
Water Clarity:	0.40
clear	0.45
Channel Feature:	0.35
pool	0.30
Channel Width:	0.25
8.00	0.05
0.28	0.00
Transect 11	0.05
Substrate:	0.10
gravel/sand	0.20
Water Clarity:	0.25
clear	0.30
Channel Feature:	0.40
pool	0.30
Channel Width:	0.25
6.00	0.20
0.23	0.10

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 10

Date and Time: 8.23.07 7:15 PM

Current Weather Conditions partly cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Highway E

GPS Mark: 70

Upstream Photo 24 Downstream Photo 25

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	<u>Fence</u>
Steep slopes	None of the Above	<u>Other</u>	<u>House</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 10
Mark # 70 **Dissolved Oxygen (ppm)** 3.1
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle	9				
Run					
Pool	91				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

9% Cobble	5% Gravel	% Sand	86% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

none

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	Clear	Green	Gray	<u>Milky</u>	<u>Other</u> <u>Reddish brown</u>
Bottom Deposit	Sludge	Solids	<u>Fine Sed.</u>	None	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 10

Mark # 70

WBID # 1351

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.35	Transect 5	0.35	Transect 9	0.00
Substrate:	0.60	Substrate:	0.55	Substrate:	0.05
silt	0.95	silt	0.85	cobble	0.05
Water Clarity:	1.00	Water Clarity:	1.00	Water Clarity:	0.20
none	1.00	none	1.00	none	0.15
Channel Feature:	1.00	Channel Feature:	0.90	Channel Feature:	0.05
pool	1.00	pool	0.90	riffle	0.35
Channel Width:	1.00	Channel Width:	1.00	Channel Width:	0.55
8.00	1.00	8.00	1.00	6.00	0.60
1.00	1.00	0.95	1.00	0.18	0.35
Transect 2	0.15	Transect 6	0.20	Transect 10	0.15
Substrate:	0.70	Substrate:	0.25	Substrate:	0.40
silt	1.00	silt	0.75	silt	0.45
Water Clarity:	1.00	Water Clarity:	1.00	Water Clarity:	0.70
none	1.00	none	1.00	none	0.85
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	0.70
pool	1.00	pool	1.00	pool	0.70
Channel Width:	1.00	Channel Width:	1.00	Channel Width:	0.55
8.00	1.00	8.00	1.00	9.00	0.40
1.00	0.85	1.00	1.00	0.50	0.15
Transect 3	0.20	Transect 7	0.35	Transect 11	0.25
Substrate:	0.75	Substrate:	0.70	Substrate:	0.65
silt	0.90	silt	0.90	silt	0.80
Water Clarity:	0.90	Water Clarity:	1.00	Water Clarity:	1.00
none	1.00	none	1.00	none	1.00
Channel Feature:	1.00	Channel Feature:	1.00	Channel Feature:	1.00
pool	1.00	pool	1.00	pool	1.00
Channel Width:	1.00	Channel Width:	0.90	Channel Width:	1.00
8.00	0.90	8.00	0.80	9.00	1.00
0.90	0.90	0.90	0.65	1.00	1.00
Transect 4	0.20	Transect 8	0.25		
Substrate:	0.70	Substrate:	0.65		
silt/gravel	0.90	silt	0.70		
Water Clarity:	0.90	Water Clarity:	0.65		
none	0.90	none	0.65		
Channel Feature:	0.75	Channel Feature:	0.65		
pool	0.50	pool	0.70		
Channel Width:	0.55	Channel Width:	0.45		
8.00	0.50	8.00	0.30		
0.63	0.40	0.65	0.15		

Site Median Site Maximum
0.85 1.00

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 11

Date and Time: 8.23.07 7:40 PM

Current Weather Conditions clear

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) County Road 85 or Dade 21

GPS Mark: 71

Upstream Photo 26 Downstream Photo 27

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 11
Mark # 71 **Dissolved Oxygen (ppm)** 4.1
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle	9				
Run					
Pool	91				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

27% Cobble	55% Gravel	% Sand	% Silt
% Mud/Clay	18% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

small willow along the bank and in the water at 5 transects

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	Clear	Green	Gray	Milky	<u>Other</u> <u>Reddish brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 11

Mark # 71

WBID # 1351

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.05	Transect 5	0.10	Transect 9	0.05
Substrate:	0.25	Substrate:	0.30	Substrate:	0.30
gravel	0.30	cobble/bedrock	0.45	gravel	0.40
Water Clarity:	0.35	Water Clarity:	0.40	Water Clarity:	0.50
clear	0.30	some	0.45	none	0.55
Channel Feature:	0.25	Channel Feature:	0.00	Channel Feature:	0.45
pool	0.20	pool	0.00	pool	0.40
Channel Width:	0.10	Channel Width:	0.15	Channel Width:	0.25
5.00	0.05	6.00	0.15	8.00	0.15
0.23	0.05	0.15	0.00	0.35	0.10
Transect 2	0.05	Transect 6	0.05	Transect 10	0.05
Substrate:	0.15	Substrate:	0.30	Substrate:	0.40
gravel	0.20	cobble/gravel	0.50	gravel	0.50
Water Clarity:	0.40	Water Clarity:	0.40	Water Clarity:	0.55
clear	0.40	some	0.40	none	0.70
Channel Feature:	0.45	Channel Feature:	0.45	Channel Feature:	0.75
pool	0.30	pool	0.40	pool	0.85
Channel Width:	0.10	Channel Width:	0.30	Channel Width:	0.90
5.00	0.10	7.00	0.25	13.00	0.85
0.18	0.05	0.35	0.10	0.70	0.70
Transect 3	0.10	Transect 7	0.10	Transect 11	0.05
Substrate:	0.20	Substrate:	0.45	Substrate:	0.10
gravel	0.40	cobble/gravel	0.50	cobble	0.10
Water Clarity:	0.50	Water Clarity:	0.55	Water Clarity:	0.15
clear	0.50	soome	0.45	clear	0.25
Channel Feature:	0.40	Channel Feature:	0.50	Channel Feature:	0.10
pool	0.35	pool	0.40	rifle	0.05
Channel Width:	0.25	Channel Width:	0.40	Channel Width:	0.05
5.00	0.30	5.00	0.30	13.00	0.05
0.33	0.30	0.43	0.20	0.08	0.00
Transect 4	0.10	Transect 8	0.05		
Substrate:	0.20	Substrate:	0.30		
gravel/bedrock	0.40	cobble/gravel	0.40		
Water Clarity:	0.55	Water Clarity:	0.40		
clear	0.70	some	0.50		
Channel Feature:	0.75	Channel Feature:	0.40		
pool	0.70	pool	0.30		
Channel Width:	0.60	Channel Width:	0.25		
7.00	0.55	5.00	0.10		
0.55	0.25	0.30	0.00		
				Site Median	Site Maximum
				0.30	0.90

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 12

Date and Time: 8.24.07 9:22 AM

Current Weather Conditions cloudy and light rain

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) County Road 102

GPS Mark: 72

Upstream Photo 28 Downstream Photo 29

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	<u>Fence</u>
Steep slopes	None of the Above	<u>Other</u>	<u>hay ground, farm buildings, and a train in the distance</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 12
Mark # 72 **Dissolved Oxygen (ppm)** 3.3
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

% of Channel Feature					
Riffle	27				
Run	64				
Pool	9				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

28% Cobble	36% Gravel	36% Sand	% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

none

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	<u>Clear</u>	Green	Gray	Milky	<u>Other</u> <u>Reddish brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 12

Mark # 72

WBID # 1351

	Depth (m)
Transect 1	0.00
Substrate:	0.10
cobble/sand	0.15
Water Clarity:	0.25
clear	0.25
Channel Feature:	0.25
run	0.25
Channel Width:	0.15
6.00	0.10
0.15	0.05

Transect 2	0.05
Substrate:	0.20
cobble/sand	0.25
Water Clarity:	0.40
clear	0.40
Channel Feature:	0.40
run	0.30
Channel Width:	0.20
6.00	0.10
0.23	0.00

Transect 3	0.00
Substrate:	0.15
cobble/sand	0.15
Water Clarity:	0.10
clear	0.05
Channel Feature:	0.00
run	0.10
Channel Width:	0.10
8.00	0.10
0.10	0.10

Transect 4	0.00
Substrate:	0.05
cobble/gravel	0.05
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.00
run	0.00
Channel Width:	0.00
7.00	0.05
0.00	0.00

Transect 5	0.00
Substrate:	0.05
cobble/gravel	0.05
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.05
run	0.00
Channel Width:	0.00
4.00	0.00
0.03	0.00

Transect 6	0.00
Substrate:	0.05
cobble/gravel	0.00
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
5.00	0.05
0.00	0.00

Transect 7	0.00
Substrate:	0.00
gravel/sand	0.05
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.00
run	0.00
Channel Width:	0.00
1.00	0.00
0.00	0.00

Transect 8	0.00
Substrate:	0.05
gravel/sand	0.10
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.05
run	0.05
Channel Width:	0.00
1.00	0.00
0.05	0.00

Transect 9	0.00
Substrate:	0.05
gravel/sand	0.10
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.10
pool	0.10
Channel Width:	0.10
4.00	0.05
0.10	0.10

Transect 10	0.00
Substrate:	0.00
gravel/sand	0.05
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.00
riffle	0.05
Channel Width:	0.00
2.00	0.00
0.00	0.00

Transect 11	0.00
Substrate:	0.00
gravel/sand	0.05
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
1.00	0.00
0.00	0.00

Site Median Site Maximum
0.05 0.40

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 13

Date and Time: 8.24.07 10:00 AM

Current Weather Conditions cloudy and rain

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) downstream of site 12

GPS Mark: 73

Upstream Photo 31 Downstream Photo 30

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	<u>Fence</u>
Steep slopes	None of the Above	<u>Other</u>	<u>hayground and a wooded area</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 13
Mark # 73 **Dissolved Oxygen (ppm)**
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle	10				
Run	45				
Pool	45				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

5% Cobble	32% Gravel	63% Sand	% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

none

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	<u>Clear</u>	Green	Gray	Milky	<u>Other</u> <u>Reddish brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 13

Mark # 73

WBID # 1351

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.00	Transect 5	0.00	Transect 9	0.00
Substrate:	0.10	Substrate:	0.10	Substrate:	0.05
gravel/sand	0.20	cobble/sand	0.05	gravel/sand	0.05
Water Clarity:	0.25	Water Clarity:	0.10	Water Clarity:	0.05
clear	0.30	clear	0.25	clear	0.05
Channel Feature:	0.35	Channel Feature:	0.30	Channel Feature:	0.05
run	0.30	pool	0.35	run	0.00
Channel Width:	0.20	Channel Width:	0.35	Channel Width:	0.00
7.00	0.10	3.00	0.15	3.00	0.00
0.20	0.05	0.20	0.35	0.03	0.00
Transect 2	0.00	Transect 6	0.10	Transect 10	0.00
Substrate:	0.10	Substrate:	0.25	Substrate:	0.00
gravel/sand	0.15	sand	0.55	gravel/sand	0.00
Water Clarity:	0.15	Water Clarity:	0.70	Water Clarity:	0.05
clear	0.15	clear	0.85	clear	0.10
Channel Feature:	0.05	Channel Feature:	0.80	Channel Feature:	0.15
run	0.05	pool	0.80	pool	0.15
Channel Width:	0.05	Channel Width:	0.75	Channel Width:	0.10
7.00	0.05	8.00	0.65	5.00	0.15
0.05	0.05	0.68	0.50	0.08	0.05
Transect 3	0.00	Transect 7	0.05	Transect 11	0.05
Substrate:	0.05	Substrate:	0.40	Substrate:	0.15
gravel/sand	0.05	sand	0.50	gravel/sand	0.20
Water Clarity:	0.15	Water Clarity:	0.50	Water Clarity:	0.25
clear	0.20	clear	0.50	clear	0.20
Channel Feature:	0.30	Channel Feature:	0.45	Channel Feature:	0.15
run	0.20	pool	0.35	pool	0.10
Channel Width:	0.15	Channel Width:	0.20	Channel Width:	0.05
4.00	0.10	6.00	0.10	3.00	0.00
0.13	0.05	0.38	0.05	0.13	0.00
Transect 4	0.00	Transect 8	0.00		
Substrate:	0.00	Substrate:	0.00		
gravel/sand	0.10	sand	0.00		
Water Clarity:	0.05	Water Clarity:	0.00		
clear	0.05	clear	0.00		
Channel Feature:	0.05	Channel Feature:	0.00		
run	0.00	riffle	0.00		
Channel Width:	0.00	Channel Width:	0.15		
1.00	0.00	5.00	0.05		
0.00	0.00	0.00	0.00		

Site Median Site Maximum
0.10 0.85

Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
Site # 14

Date and Time: 8.24.07 11:20am

Current Weather Conditions rain

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Highway D

GPS Mark: 74

Upstream Photo 33 Downstream Photo 32

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	None of the Above	<u>Other</u>	<u>Hayground, pasture, a house</u>

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 14
Mark # 74 **Dissolved Oxygen (ppm)** 3.1
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle	27				
Run					
Pool	73				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? y

Substrate:

% Cobble	50% Gravel	50% Sand	% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

none

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	<u>Clear</u>	Green	Gray	Milky	<u>Other</u> <u>Reddish brown</u>
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 14

Mark # 74

WBID # 1351

	Depth (m)
Transect 1	0.15
Substrate:	0.30
gravel/sand	0.50
Water Clarity:	0.40
none	0.35
Channel Feature:	0.35
pool	0.25
Channel Width:	0.25
7.00	0.15
0.28	0.10
Transect 2	0.05
Substrate:	0.20
gravel/sand	0.20
Water Clarity:	0.20
none	0.00
Channel Feature:	0.35
pool	0.40
Channel Width:	0.40
7.00	0.20
0.20	0.10
Transect 3	0.20
Substrate:	0.20
gravel/sand	0.40
Water Clarity:	0.50
none	0.65
Channel Feature:	0.55
pool	0.45
Channel Width:	0.20
7.00	0.25
0.33	0.20
Transect 4	0.10
Substrate:	0.05
gravel/sand	0.05
Water Clarity:	0.10
none	0.15
Channel Feature:	0.05
riffle	0.00
Channel Width:	0.00
6.00	0.00
0.05	0.05

	Depth (m)
Transect 5	0.05
Substrate:	0.05
gravel/sand	0.20
Water Clarity:	0.25
none	0.20
Channel Feature:	0.05
riffle	0.00
Channel Width:	0.05
4.00	0.00
0.05	0.00
Transect 6	0.10
Substrate:	0.25
gravel/sand	0.40
Water Clarity:	0.50
none	0.40
Channel Feature:	0.45
pool	0.45
Channel Width:	0.45
8.00	0.30
0.40	0.25
Transect 7	0.10
Substrate:	0.25
gravel/sand	0.45
Water Clarity:	0.45
none	0.40
Channel Feature:	0.50
pool	0.40
Channel Width:	0.35
8.00	0.25
0.38	0.10
Transect 8	0.60
Substrate:	0.55
gravel/sand	0.45
Water Clarity:	0.45
none	0.30
Channel Feature:	0.45
pool	0.45
Channel Width:	0.30
8.00	0.30
0.45	0.35

	Depth (m)
Transect 9	0.40
Substrate:	0.45
gravel/sand	0.45
Water Clarity:	0.50
none	0.40
Channel Feature:	0.30
pool	0.30
Channel Width:	0.30
8.00	0.25
0.35	0.25
Transect 10	0.35
Substrate:	0.35
gravel/sand	0.50
Water Clarity:	0.60
none	0.60
Channel Feature:	0.55
pool	0.55
Channel Width:	0.25
6.00	0.15
0.43	0.00
Transect 11	0.00
Substrate:	0.00
gravel/sand	0.00
Water Clarity:	0.15
none	0.25
Channel Feature:	0.20
riffle	0.25
Channel Width:	0.10
4.00	0.05
0.08	0.00

Site Median Site Maximum
0.25 0.65

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 1351
 Site # 15

Date and Time: 8.24.07 11:55am

Current Weather Conditions rain

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) County Road 360/Route 92

GPS Mark: 75

Upstream Photo 34 Downstream Photo 35

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	<u>Fence</u>
Steep slopes	None of the Above	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 1351 **Site #** 15
Mark # 75 **Dissolved Oxygen (ppm)** 3.6
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Select one of the following channel features:

	% of Channel Feature				
Riffle					
Run	91				
Pool	9				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

% Cobble	50% Gravel	50% Sand	% Silt
% Mud/Clay	% Bedrock		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

10% small willow

Water Characteristics

Odor	Sewage	Musky	Chemical	<u>None</u>	Other
Color	Clear	Green	Gray	Milky	Other
Bottom Deposit	Sludge	Solids	Fine Sed.	<u>None</u>	Other
Surface Deposit	Oil	Scum	Foam	<u>None</u>	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 15

Mark # 75

WBID # 1351

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.05	Transect 5	0.05	Transect 9	0.05
Substrate:	0.15	Substrate:	0.10	Substrate:	0.15
gravel/sand	0.30	gravel/sand	0.15	gravel/sand	0.25
Water Clarity:	0.45	Water Clarity:	0.20	Water Clarity:	0.35
clear	0.35	clear	0.25	some	0.35
Channel Feature:	0.35	Channel Feature:	0.35	Channel Feature:	0.35
run	0.30	run	0.30	run	0.35
Channel Width:	0.25	Channel Width:	0.20	Channel Width:	0.20
6.00	0.20	6.00	0.15	7.00	0.15
0.28	0.05	0.18	0.05	0.23	0.00
Transect 2	0.05	Transect 6	0.00	Transect 10	0.00
Substrate:	0.10	Substrate:	0.15	Substrate:	0.10
gravel/sand	0.15	gravel/sand	0.20	gravel/sand	0.15
Water Clarity:	0.20	Water Clarity:	0.35	Water Clarity:	0.25
clear	0.35	clear	0.35	some	0.40
Channel Feature:	0.40	Channel Feature:	0.30	Channel Feature:	0.35
run	0.40	run	0.30	run	0.30
Channel Width:	0.30	Channel Width:	0.20	Channel Width:	0.25
7.00	0.15	8.00	0.15	6.00	0.20
0.18	0.05	0.20	0.10	0.23	0.10
Transect 3	0.05	Transect 7	0.15	Transect 11	0.05
Substrate:	0.15	Substrate:	0.30	Substrate:	0.15
gravel/sand	0.35	gravel/sand	0.35	gravel/sand	0.25
Water Clarity:	0.55	Water Clarity:	0.50	Water Clarity:	0.25
clear	0.65	clear	0.55	some	0.40
Channel Feature:	0.70	Channel Feature:	0.50	Channel Feature:	0.30
run	0.50	run	0.50	run	0.25
Channel Width:	0.30	Channel Width:	0.35	Channel Width:	0.20
7.00	0.15	9.00	0.20	7.00	0.15
0.33	0.00	0.35	0.15	0.23	0.05
Transect 4	0.15	Transect 8	0.10		
Substrate:	0.20	Substrate:	0.15		
gravel/sand	0.45	gravel/sand	0.30		
Water Clarity:	0.60	Water Clarity:	0.35		
clear	0.75	clear	0.45		
Channel Feature:	0.70	Channel Feature:	0.60		
pool	0.65	run	0.50		
Channel Width:	0.40	Channel Width:	0.35		
8.00	0.25	10.00	0.20		
0.43	0.20	0.33	0.05		

Site Median Site Maximum
0.25 0.75

WBID# 1351



Site# 1 Photo ID# 2, Upstream



Site# 1 Photo ID# 1, Downstream



Site# 2 Photo ID# 3, Upstream



Site# 2 Photo ID# 4, Downstream

WBID# 1351



Site# 3 Photo ID# 7, Upstream



Site# 3 Photo ID# 6, Downstream



Site# 4 Photo ID# 9, Upstream



Site# 4 Photo ID# 8, Downstream

WBID# 1351



Site# 5 Photo ID# 10, Upstream



Site# 5 Photo ID# 11, Downstream



Site# 6 Photo ID# 13, Upstream



Site# 6 Photo ID# 12, Downstream

WBID# 1351



Site# 7 Photo ID# 15, Upstream



Site# 7 Photo ID# 14, Downstream



Site# 8 Photo ID# 18, Upstream



Site# 8 Photo ID# 17, Downstream

WBID# 1351



Site# 9 Photo ID# 21, Upstream



Site# 9 Photo ID# 22, Downstream



Site# 9 Photo ID# 23, Quarry



Site# 10 Photo ID# 24, Upstream

WBID# 1351



Site# 10 Photo ID# 25, Downstream



Site# 11 Photo ID# 26, Upstream



Site# 11 Photo ID# 27, Downstream



Site# 12 Photo ID# 28, Upstream

WBID# 1351



Site# 12 Photo ID# 29, Downstream



Site# 13 Photo ID# 31, Upstream



Site# 13 Photo ID# 30, Downstream



Site# 14 Photo ID# 33, Upstream

WBID# 1351



Site# 14 Photo ID# 32, Downstream



Site# 15 Photo ID# 34, Upstream



Site# 15 Photo ID# 35, Downstream